

March 19, 2018

EX PARTE PRESENTATION

Ms. Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Re: Ex Parte Presentation, OneWeb Petition for Reconsideration
IB Docket No. 16-408

Dear Ms. Dortch:

Karousel LLC¹ opposes OneWeb's request that the Federal Communications Commission reconsider the time-tested sharing procedures the United States has applied to non-geostationary satellite orbit ("NGSO") systems.² Under the United States' framework, NGSO operators must share the band equally when: (i) one system increases the noise temperature of another system by more than 6 percent; and (ii) good-faith coordination proves unsuccessful (the "U.S. NGSO Sharing Rule").³ Rather than follow the U.S. NGSO Sharing Rule, OneWeb advocates for a rule that would award the entire band to the first applicant that happened to submit its filing with the International Telecommunications Union (the "ITU Rule").

Karousel agrees with other commenters that replacing the U.S. NGSO Sharing Rule with the first-in-time ITU Rule would promote speculation and warehousing; encourage inefficient system designs; reward anticompetitive behavior; and discourage good-faith coordination.⁴ By

¹ Karousel is an innovative, U.S.-based company that plans to offer a "celestial video jukebox" to consumers for whom broadband over video is inaccessible or unaffordable. Karousel has filed an NGSO constellation application that will provide a first-of-its-kind satellite-based video and data distribution platform using up to four operational satellites operating in each of the three global regions in highly inclined, elliptical, non-geostationary orbits. Karousel plans to offer consumers and programmers a new avenue to consume and share video and data on demand, particularly in rural America. See Application for Authority to Launch and Operate a Non-Geostationary Earth Orbit Satellite System in the Fixed Satellite Service, IBFS File No. SAT-LOA-20161115-00113 (filed Nov. 15, 2016).

² Petition for Reconsideration of WorldVu Satellites Limited, Update to Parts 2 and 25 Concerning Non-Geostationary, Fixed-Satellite Service Systems and Related Matters, IB Docket No. 16-408 (filed Jan. 17, 2018) ("OneWeb Petition"); see also *Update to Parts 2 and 25 Concerning Non-Geostationary, Fixed-Satellite Service Systems and Related Matters*, Report & Order and Further Notice of Proposed Rulemaking, 32 FCC Rcd 7809 (2017) ("NGSO R&O").

³ 47 C.F.R. § 25.261.

⁴ See, e.g., Space Exploration Technologies Corp., Response to Petitions to Reconsideration, IB Docket No. 16-408 (filed Feb. 20, 2018) ("SpaceX Opposition"); Opposition and Response of SES Americom, Inc. and O3b Limited to Petitions for Reconsideration, GN Docket No. 16-408 (filed Feb. 20, 2018); Opposition of the Boeing Company, GN Docket No. 16-408 (filed Feb. 20, 2018) ("Boeing Opposition");

giving preferential access over the entire band to one operator, the ITU Rule would require every other NGSO applicant to “design around” the technical specifications of a single proposed system whose operations may never come into fruition. The first-in-time applicant would have no reason to design an NGSO constellation that makes optimal use of space station and spectrum resources based on the applicant’s business model, as it does today under the U.S. NGSO Sharing Rule.⁵ To the contrary, adopting the first-in-time ITU Rule would encourage applicants to design systems that inefficiently use spectrum because doing so would better allow the first-in-time applicant to extract monopoly rents from later applicants. The risk of encouraging rent-seeking behavior increases where, as here, the first-in-time applicants have proposed “mega-constellations,” which could effectively occupy much of the available spectrum and orbital resources over the United States.⁶ For these reasons, the Commission has long recognized that relying on the ITU filing date as the default sharing mechanism would impair “licens[ing] satellites in a manner that promotes open entry, competition, maximum flexibility, technical innovation, and seamless networks”⁷ and “unduly chill investment in competing systems.”⁸

The Commission’s alternative to the ITU Rule is not “band-splitting,” as OneWeb insinuates. The U.S. NGSO Sharing Rule requires good-faith coordination as the default. Only where good-faith coordination proves unsuccessful does equitable sharing become an option. To the extent equitable sharing is a harsh remedy, it serves the purpose of discouraging parties from prematurely abandoning their coordination efforts. As SpaceX notes, “virtually every NGSO applicant commenting in this proceeding” agrees that “splitting spectrum is the least efficient approach and should be avoided if at all possible. Thus, every NGSO operator has strong incentives to reach a successful coordination arrangement with its NGSO counterparts, rather than implement the default spectrum-sharing mechanism.”⁹ By penalizing all equally, the United States’ equitable sharing rule applies pressure on each applicant to coordinate where it otherwise would not. OneWeb’s narrow attack on the purported harms associated with “band-splitting” misses the broader context of the U.S. NGSO Sharing Rule, which features equitable sharing as only one part of a larger, holistic mechanism to encourage the deployment of efficient systems with a high likelihood of real-world deployment. The U.S. NGSO Sharing Rule promotes

Opposition of Space Norway to Petition for Reconsideration, IB Docket No. 16-408 (filed Feb. 20, 2018); Opposition of ViaSat, Inc. to Petition for Reconsideration of WorldVu Satellites Limited, GN Docket No. 16-408 (filed Feb. 20, 2018) (“ViaSat Opposition”).

⁵ See *NGSO R&O* ¶ 50 (“If the first priority system is not ultimately deployed, it could delay the provision of NGSO FSS broadband by lower-priority systems fearful of a hypothetical sharing environment. And it gives the highest priority system weaker incentives to accommodate competing NGSO FSS systems. In contrast, our default sharing solution sets all applicants in a processing round on an equal basis.”).

⁶ See Boeing Opposition at 4; ViaSat Opposition at 7.

⁷ *Rulemaking to Amend Parts 1, 2, 21, and 25 of the Commission's Rules to Redesignate the 27.5-29.5 GHz Frequency Band, to Reallocate the 29.5-30.0 GHz Frequency Band, to Establish Rules and Policies for Local Multipoint Distribution Service and for Fixed Satellite Service*, Third Report and Order, GN Docket 92-297, 12 FCC Rcd 22310, 22316, ¶ 14 (1997).

⁸ *NGSO R&O* ¶ 50.

⁹ SpaceX Opposition at 7.

system and spectrum efficiency, encourages timely deployment, and guards against the regulatory gamesmanship well documented in ITU Rule systems.¹⁰

Finally, Karousel agrees that OneWeb's attack on the U.S. NGSO Sharing Rule is time-barred.¹¹ The Commission has already considered and rejected all of OneWeb's arguments.¹² The U.S. NGSO Sharing Rule, moreover, has been in place since 2002; therefore, nothing in the *NGSO R&O* is available for the Commission to "reconsider."¹³ The Commission did not change the U.S. NGSO Sharing Rule in the *NGSO R&O*, but rather extended the United States' longstanding policy to additional spectrum bands. Supplanting the U.S. NGSO Sharing Rule with the ITU Rule would undermine the Commission's processing round framework, which has long sought to avoid a situation that would permit "the first qualified applicant [to] request authority to operate in so much of the orbit-spectrum resource that additional market entry would be precluded."¹⁴ Granting the OneWeb Petition would also reverse the United States' established practice against applying the ITU's coordination rules,¹⁵ which would force the United States to make difficult judgment calls about whether rights under the ITU's procedures have been properly perfected.¹⁶ No changed circumstances justify reconsideration of these past decisions.

* * *

The U.S. NGSO Sharing Rule has served operators and the public for more than twenty years. The rule maximizes the efficient use of spectrum, treats all NGSO applicants in the same processing round equally, functions as a check against speculative paper systems, and creates a stable predicate for investment and constellation design. Time and again, the United States has

¹⁰ See, e.g., Rob Frieden, *Balancing Equity and Efficiency Issues in the Management of Shared Global Radiocommunications Resources*, 24 U. Pa. J. Int'l Econ. L. 289, 304-305 (2003) ("Likewise, the ITU cannot readily discipline member nations from 'papering' the registration system with spectrum and satellite registrations designed to foreclose uses by operators in other nations, extract payments from others with more immediate needs, or secure priority future access based on the possibility of a spectrum need. Few observers would dispute that the ITU spectrum and orbital slot management process creates the potential for congestion in spectrum and orbital slot usage. Much of the potential for interference arises from speculative paper filings of phantom spectrum and satellite use proposals that lock up and warehouse currently unneeded spectrum and orbital slots.").

¹¹ See ViaSat Opposition at 3-5.

¹² See *id.*

¹³ See *The Establishment of Policies and Service Rules for the Non-Geostationary Satellite Orbit, Fixed Satellite Service in the Ku-band*, Report and Order, 17 FCC Rcd 7841, ¶ 27 (2002).

¹⁴ *Amendment of the Commission's Space Station Licensing Rules and Policies*, First Report and Order, 18 FCC Rcd 10760, ¶ 22 (2003).

¹⁵ *NGSO R&O* ¶ 45.

¹⁶ See *EchoStar Satellite Operating Company*, 28 FCC Rcd 10412, ¶ 12 (2013) (determining that the International Bureau "appropriately declined to make determinations concerning the 'perfecting' of ITU filings of other Administrations, observing correctly that such determinations are for the ITU"); see also ViaSat Opposition at 7.

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rejected the ITU Rule because it does none of these things. Denying OneWeb's procedurally improper petition will help ensure the Commission continues to reward investment and innovation in satellite infrastructure.

Respectfully submitted,

/s/ Don Doering

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